

Notice of Allowability

Application No.

10/710,659

Examiner

Zeev Kitov

Applicant(s)

CHANG ET AL.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/12/06.
2. ☒ The allowed claim(s) is/are 5 - 7.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: Proposed Amendment, Attachment, 10/16/06.

DETAILED ACTION

Examiner acknowledges a submission of the amendment and arguments filed on September 12, 2006. Claims 1 – 4, and are deleted; New Claims 5 – 8 are added. Amendment and arguments have overcome rejections under 103(a).

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The Examiner's Amendment has been authorized by the Attorney, Mrs. Belinda Lee, in the Proposed Amendment filed on October 16, 2006.

Please cancel Claim 8.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

An amended independent Claim 5 discloses a control circuit for a frequency converter, which inter alia, includes: the first parallel circuit including a switch circuit, being turned on or off by a starter circuit, and a timer switch connected in parallel to the switch circuit to form the first parallel circuit; and a second parallel circuit, for turning on or off the frequency converter, wherein the first parallel circuit and the second parallel circuit are

connected in series, the second parallel circuit including a starter relay, wherein when a voltage level of the power supply is below a first predetermined voltage level, the starter relay is turned off, and when the voltage level of the power is above a second predetermined voltage level, the starter relay is turned on; and a timer relay, wherein when the voltage level of the power supply is below the first voltage level, the timer relay remains being turned on for a predetermined time period and to keep the first parallel circuit receiving the power source, which keeps the frequency converter on, wherein during the predetermined time period, if the voltage level of the power supply is increased to the first predetermined level, the frequency converter remains turned on keeping the equipment being operated normally, wherein after the predetermined time period, if the voltage level of the power supply is still below the second voltage level, the timer relay is turned off and the frequency converter is also turned off.

The closest reference for the claim is Applicant Admitted Prior Art, which discloses some elements of the claim, such as starter circuit, switch circuit, starter relay, frequency converter and load equipment. However, it does not disclose the timer relay with its contacts in parallel to the switch circuit. Another reference Matsko discloses the circuit wherein when the voltage level of the power supply to the control circuit is raised to above a second predetermined voltage level defined by the zener diode (element ZD5 in Fig. 1) voltage and the voltage divider R10, R13 and R6 (the resistor R7 is shorted by saturated output of comparator CO3) (see col. 6, lines 18 – 47), the starter relay (element UVRC in Fig. 1) is turned on.

It further discloses a timer relay (elements R1 – R3, C1 – C3, CO1 – CO3 in Fig. 1), wherein when the voltage level of the power supply to the control circuit is below the first predetermined voltage level defined by the zener diode (element ZD5 in Fig. 1) voltage and the voltage divider R10, R13, R6 and R7 (the R7 is not is shorted by the floating output of comparator CO3) (see col. 6, lines 18 – 47), the starter relay (element UVRC in Fig. 1) remains on for a predetermined time period defined by the delay circuit (elements C1 – C3, R1 – R3 in Fig. 1). The timer relay determines whether or not to turn on/off the timer switch (element UVRC in Fig. 1).

However, it does not disclose the timer switch connected in parallel to the switch circuit.

Allowability resides, at least in part, in the above-described limitations, which has not been disclosed in the Prior Art in a search.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose telephone number is (571) 272-2052. The examiner can normally be reached on 8:00 – 4:30. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272 – 2800, Ext. 36. The fax phone number for organization where this application or proceedings is assigned is (571) 273-8300 for all communications.


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